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4 b) an optical system [(4)] for imaging the heat radiation emanating from
5 the measurement spot onto the detector [(1)]

6 c) and a sighting arrangement having a diffractive optical system to
7 produce a light intensity distribution [(5)] for identifying the position and size of the
8 measurement spot [(2a)] on the object of measurement by means of visible light [(6)]
9 characterised in that

10 d) the sighting arrangement (5) has a diffractive optical system
11 (holographic element 5b) to produce a light intensity distribution].

1 2. (Amended) Device as claimed in Claim 1, [characterised in that] wherein
2 the sighting arrangement [(5)] also has at least one additional refracting and/or reflecting
3 optical element [(5c, 5'c)].

1 3. (Amended) Device as claimed in Claim 1, [characterised in that] wherein
2 the diffractive optical system is formed by a holographic element [(5b)].

1 4. (Amended) Device as claimed in Claim 1, [characterised by such a design
2 of the diffractive optical system that] wherein the light intensity distribution on the object of
3 measurement [(2)] forms an annular marking [(3a; 3b)].

1 5. (Amended) Device as claimed in Claim 4, [characterised in that] wherein
2 the light intensity distribution is formed by at least two circular markings [(3f, 3g, 3h)] which
3 are arranged concentrically with respect to one another.

1 6. (Amended) Device as claimed in Claim 4 or 5, [characterised in that]
2 wherein the light intensity distribution also has a further marking [(3c)] which represents the
3 centre of the measurement spot.

1 7. (Amended) Device as claimed in Claim 1, [characterised by such a design
2 of] wherein the diffractive optical system that the light intensity distribution on the object of
3 measurement [(2)] forms a cross-shaped marking [(3d, 3e)].

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1 8. (Amended) Device as claimed in Claim 5, [characterised in that] wherein
2 the annular concentric markings in each case identify a region of the measurement spot [(2a)]
3 from which a certain percentage of the energy of the received heat radiation originates.

1 9. (Amended) Device as claimed in Claim 2 [5], [characterised in that]
2 wherein optical element [(5'c)] has a focus plane, wherein one circular marking identifies the
3 measurement spot [(2a)] lying between the optical element and the focus plane and the other
4 marking identifies the measurement spot lying behind the focus plane [-] when viewed from
5 the optical element.

1 10. (Amended) Device as claimed in Claim 1, [characterised in that] wherein
2 the sighting arrangement has a light source [(5a)], particularly a laser, for irradiating the
3 diffractive optical system [(4)].

1 11. (Amended) Device as claimed in Claim 1, [characterised in that] wherein
2 a beam divider [(4a, 4'a)] which is transparent for the visible light and reflective for the heat
3 radiation emanating from the object of measurement is disposed in the beam path of the
4 sighting arrangement [(5)].

1 12. --CANCELLED--

1 13. (Amended) Device as claimed in Claim 1, [characterised in that] wherein
2 the beam divider [(4a)] is disposed between the optical element [(5c)] and the object of
3 measurement [(2)].

1 14. --CANCELLED--

Please enter the following new claim.

1 --15. (New) A laser sighting device for visibly outlining an energy zone to be
2 measured by a radiometer when measuring the temperature of a surface, with the energy zone
3 having a periphery, said device comprising:
4 a laser for generating a laser beam;

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1 a diffractive element for causing said laser beam to visibly outline the periphery
2 of said energy zone

CONCLUSION

In view of the foregoing, Applicant believes all claims now pending in this Application are in condition for allowance. The issuance of a formal Notice of Allowance at an early date is respectfully requested.

If the Examiner believes a telephone conference would expedite prosecution of this application, please telephone the undersigned at 415-576-0200.

Respectfully submitted,


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